CHAPTER

11

Capital Improvements and Equity

By William Lucy, AICP

A capital improvements program (CIP) is a financial instrument for scheduling project costs and debt service and limiting fluctuations. It typically covers five or six years. A CIP is a priority planning instrument for implementing elements of comprehensive plans, development plans, and functional plans. It also is an instrument for distributing projects geographically. In these ways, capital improvement programs operationalize the concept of equity.[1]

Equity is concerned with what is fair. Equity evokes eternal questions about "who should get what." Spontaneous responses to that question often take the form of saying "everyone should get the same facilities and services." But for some services that is impossible, and sometimes it is undesirable when it is possible. If some people need more of certain services than others, equity may call for unequal rather than equal service distribution.

In this paper, I will examine the implications of five concepts of equity for answering the question, "Who should get what?" I will consider the role of planning standards, stages of planning processes during which planners can apply the equity concepts, indicators of facility and service distribution, and methods of rating priorities in capital improvement programming.

EQUALITY

One equity notion is that everyone should receive the same facilities unless there are "good" reasons to do something else. In practice, equality may be impossible, as when physical facilities are involved. Some facilities, like parks, libraries, fire stations, and bus stops are generally considered good things to be near. But because they are few in number, people will inevitably be located at varying distances from them. In such instances, an equality standard is constructed as a threshold of adequacy, so that everyone should be within an acceptable distance of the facility in order to obtain service when they need or want it.

Many facilities, however, are considered bad for their neighbors, even though they may be good, even essential, for the community. Examples of such facilities are toxic waste disposal sites, halfway houses, and expressway interchanges. In these instances, an equality standard

Defining the CIP

To refresh the memories of those whose only exposure to a CIP was in a textbook, it is a multi-year schedule of public physical improvements. . . . The CIP sets forth proposed expenditures for systematically constructing, maintaining, upgrading, and replacing a community's physical plant. Capital improvement projects are typically major, infrequent expenditures, such as the construction of a new facility or nonrecurring rehabilitation or major repair of an existing facility.

For a planner, a CIP is more than a schedule of expenditures. [L]ike any budgetary process, a CIP is also riddled with policy issues, choices, and political pressures. The policy issues are often unwritten or unstated assumptions, but they are a powerful force in driving the program.

Every planner doing a CIP needs to understand that preparing a budget, whether for operating or capital expenditures, is more than technical procedures. A budget is at the heart of the political process. A budget reconciles the conflicts in our democratic society and allocated limited resources among competing interests.

After the political posturing and oratory are over, it is a test of how society "puts its money where its mouth is." . . . Invariably, a budget is a set of compromises reflecting political accommodation.

—Robert A. Bowyer, AICP, *Capital Improvements Programs: Linking Budgeting and Planning*, PAS Report Number 442, 1993.

would call for avoiding cumulative disadvantages, in which one neighborhood would have many of these undesirable facilities while other neighborhoods have none.

NEED

Need is the opposite of equality, in that it implies that unequals should be treated in an appropriately unequal manner based on relevant reasons. Relevant reasons connect individual characteristics, territorial features, and the purposes for which public facilities and services are provided.

Need indicators can be general or specific. Poverty is a general need indicator; persons in poverty will have little capacity to pay for private goods and services, such as books and recreation. Proximity to a public library and recreation center would be a greater need for poverty families than for well-to-do families. The importance of a governmental response to needs of persons in poverty is especially apparent when large poverty concentrations occur, as they often do.

Need indicators also can be specifically relevant to public functions. Structural conditions associated with high fire incidence, and fire-related injuries and deaths, would indicate need for a fire station nearby so that response time to reported fires would be brief.

DEMAND

The notion of basing equity on demand implies that active interest by constituents in a service should be rewarded. Belief in the appropriateness of responding to citizen concerns is a fundamental principle of democratic governance. Demand for local facilities and services is expressed either in use of services or in requests and complaints about them. It seems sensible to respond to requests for service and to avoid forcing a service on reluctant consumers.

But conflicts occur between demand and other equity concepts. Take libraries, for example. If use—manifested in book circulation rates—is relied on to allocate funds for acquiring library materials, determining hours of operation, remodeling aging structures, and even locating additional branches, middle- and upper-income neighborhoods usually will be the beneficiaries. But such a planning standard would conflict both with basing equity on need (poverty) and equality (everyone

should be no greater distance than some mileage threshold from similar facilities).

Residents of better-off neighborhoods may register more requests for improved service, such as for public school improvements, refurbished parks, and reconstructed streets, than do residents of poorer neighborhoods. In such instances, the democratic ideal of responsiveness may lead to unequal distribution of public investments contrary to the distribution that need indicators would produce.

PREFERENCE

Preferences supplement demands. Preferences may be unexpressed, either because access to facilities is difficult, thereby limiting use, or because constituents are inarticulate or skeptical about the results if they were to make requests or complaints. But the means of ascertaining preferences, including public hearings, committees, and surveys, are inaccurate or expensive. They also may yield results at odds with equality and need approaches to equitable distributions of capital facilities.

WILLINGNESS TO PAY

A common equity idea is that people who use a service should pay for it. The amount of use then is determined by willingness (and ability) to pay for it. This principle is applied most often with services for which units can be purchased and billed incrementally. Utility services—water, sewer, gas, and electricity—to individual structures usually are financed this way. Some discretionary services, like public transit and specialized recreation programs, often are billed to users. Emergency services like police and fire, developmental services like education and libraries, and amenity services, like neighborhood parks, rarely are charged to individual users.

When willingness to pay is used to finance a service, partial use of other equity concepts still may occur. Fares almost always are supplemented from the general fund in financing public transit, thereby taking need into account. In addition, demand influences the location of routes. Gas and electricity use may not be subsidized directly, but generous delays in shutting off service during cold weather and special funds to help those unable to pay their bills invoke the need concept of

equity. So even when willingness to pay is emphasized, it often is modified by other equity concepts.

The most questionable application of the willingness to pay concept occurs when it is applied to the initial provision of facilities and services, as through special assessments on users to have services installed. Sometimes, entire neighborhoods may be excluded from water and sewer service because residents are unable to pay the cost of connections, even if they can pay for small amounts of the service once it is connected.

STAGES IN APPLYING EQUITY CONCEPTS

Three stages are useful for applying equity concepts to capital improvement programming. In the first stage, the implications of using equity concepts other than equality should be considered. In the second stage, estimates of the distributional consequences of the jurisdiction's current planning standards should be made. In the third stage, alternative equity concepts for specific facilities and services should be discussed with decision makers.

This order is suggested to limit analytical efforts and deliberation costs. The first stage involves brainstorming and does not require research. The second stage requires determining what distributional planning standards and decision rules have been used, and are currently being used, for capital improvements, and some analysis of the actual consequences of their use. The third stage involves capturing the attention of key decision makers and deliberating with them about whether they are willing to change the balance among equity concepts, or whether the political costs of confrontation with them should be engaged.

In stage two, consequences of planning standards for facilities and decision rules for services should be identified by analyzing patterns of facility and service distribution. An analytic framework with examples of indicators is presented in the following table. This framework is a version of a systems analysis. It includes indicators of resources (facilities, equipment, expenditures, and personnel) and activities (measured by frequency and duration) which have direct results (including intended and unintended consequences) and secondary impacts (changes in social conditions, which usually have multiple causes).

EXAMPLES OF FACILITY AND SERVICE INDICATORS

RESOURCES	Facilities	Neighborhood park acres per 1,000 residents, fire stations and branch libraries per 10,000 residents
	Equipment	Playground swings per 1,000 children age 12 and under
	Expenditures	Dollars per 1,000 persons or 1,000 households for neighborhood parks and playgrounds, branch libraries, and fire and police stations
	Personnel	Number per 1,000 persons or 1,000 households for branch library operations, neighborhood park maintenance, and water line repair
ACTIVITIES	Frequency	Refuse pick-ups per week, street cleanings per month, hours of operation of swimming pools and branch libraries per week, time between buses (headways)
	Duration	Response time by police and fire personnel from receipt of call for service, and speed of repairs, such as average length of interrupted water and sewer service for repairs
RESULTS	Intended Consequences	Satisfactory water pressure at the tap, satisfactory street bumpiness ratings, satisfactory fire suppression rates, residents sufficiently satisfied with neighborhood parks and other services in citizen surveys
	Unintended Consequences	Days of unpleasant water taste, number of missed refuse collections, residents dissatisfied with the quantity or quality of facilities and services in citizen surveys
	Use of Service, by Amount	Library books circulated per year, swimmers per day, park users per week, bus riders per day
	Failure to Use, by Reason	Percent of residents not using bus service due to excessive waits and walking distances, percent of residents not using branch libraries due to distance
IMPACTS	Changes in Social Conditions	Facility and service relationships to social indicators, such as crime rates, property values, satisfaction with neighborhoods, and the like, which are partially identifiable with quasi-experimental design and multivariate statistical analyses

Multiple measures of facilities and services are needed in distributional analyses, because findings using different types of indicators—such as indicators of resources and results—often will yield divergent findings. Equality in expenditures (resource indicators) in parks for basketball courts and lighting may not be matched by equality in amount of use (result indicator) or the condition of facilities and equipment after one year (result indicator). Both types of indicators are important. Public officials also may be interested in crime rate changes (impact indicator) before and after the investment in basketball courts, although impact indicators reflect multiple influences.

PRIORITIES IN CAPITAL IMPROVEMENTS

Because capital improvement programs implement elements of comprehensive plans, development plans, functional plans, and campaign promises, they will be shaped with more than distributional equity in mind. In Philadelphia and Utica, New York, for example, capital improvements were used to advance citywide economic development goals, including constituting the local share of federally supported development projects. In Syracuse, New York, capital improvements were used to redeem mayoral campaign promises to build new schools as part of a pledge to spend more in neighborhoods and less in the central business district.

Capital improvements also implement citywide goals in formal planning processes. In St. Paul, Minnesota, a two-year process included proposals initiated by department heads, business groups, and neighborhood associations, review by a commission composed of district citizen planning councils, public hearings, a recommended capital budget submitted by the mayor, and final decision by the city council.

The participants' options were limited, however, by an allocation policy previously adopted by the city council which assigned percentages of the total allocation to categories, including neighborhood improvement, economic development, and citywide service improvement. Within categories, planners used a complicated rating system, with points assigned to a variety of potential benefits. Ratings included whether each proposed project conformed with the comprehensive plan and with the capital allocations policy, as well as many other considerations.

In Falls Church, Virginia, the city council deliberated about large projects, but also set aside fixed amounts each year for streets, parkland

acquisition, utility undergrounding, storm drainage, and economic development. These categories provided funds to take advantage of public-private partnership leveraging opportunities that occurred outside the budget cycle, as well as permitting delegation of detailed priority decisions within previously approved dollar limits to the city manager and department heads.

With formal CIP processes, such as those in St. Paul and Falls Church, deliberations about equity criteria can occur at several stages. Formal CIP processes increase the usefulness of detailed analysis of current and past facility distribution and service quality patterns. It is particularly important to determine whether certain neighborhoods experience cumulative deficiencies. A specific neighborhood may appear disadvantaged in neighborhood park acreage and equipment, for example, but perhaps not sufficiently to warrant locating a new neighborhood park there. But if this same neighborhood also is deficient in distance from library services, fire response time, water quality and pressure, and street, sidewalk, and curb conditions, then remedial action on several of these facilities and services would deserve high priority.

If detailed analyses of facility and service distribution are conducted, mayors, city managers, county administrators, council members, county supervisors, planning commissions, and citizens are empowered to compare services and deliberate about appropriate standards, including equity considerations. Such an analysis was conducted by the City of Savannah. It found predominantly poor and black neighborhoods were underserved with sewers, fire hydrants, and paved streets. After greater attention was paid to these cumulative neighborhood disparities, a subsequent survey found that the infrastructure inequalities had been reduced.

CONCLUSION

Geographic distribution of services may not receive enough weight in making capital improvement program decisions. Some evidence on that score is available from an Urban Institute survey of decision processes in 25 cities.

The Urban Institute found that the most frequently used criteria were effects of capital projects on operating and maintenance costs (19 cities), conformance to adopted plans and policies (16), availability of state or federal funds (14), health and safety effects (13), geographic distribution

effects (10), economic revitalization effects (10), existing substandard or emergency situations (9), environmental or aesthetic effects (8), legal mandates (7), operational efficiency (7), departmental priorities (6), energy conservation (5), elected officials' priorities (5), and outside pressure (5).

It is unfortunate that only 10 of 25 cities used geographic distribution effects in making CIP decisions. Especially in large and populous jurisdictions, failure to take geographic distribution of facilities and services into account can lead to severe inequities.

NOTES

1. For additional discussion of the relationship between capital improvements and equity, see William Lucy, *Close to Power: Setting Priorities with Elected Officials* (Chapter 5, Capital Budgeting and Priority Planning, and Chapter 7, Equity Concepts and Priority Planning), Chicago: Planners Press, 1988; Lucy, "Equity Planning for Infrastructure: Applications" in Jay M. Stein, ed., *Public Infrastructure Planning and Management*, Beverly Hills: Sage Publications, 1988; and Frank S. Levy, Arnold J. Meltsner, and Aaron Wildavsky, *Urban Outcomes*, Berkeley: University of California Press, 1974.

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